

Allowance

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Michael Schmidt on 29 March 2010.

The application has been amended as follows:

In line 1 of claim 62, the phrase "Claim 22" has been replaced by --Claim 59--.

Claim 82 has been cancelled.

Reasons of Allowance

The following is an examiner's statement of reasons for allowance:

The prior art of record, when considered as a whole, alone or in combination, neither anticipates nor renders obvious: an ejector cycle refrigeration system having a compressor, a condenser, an ejector and a first evaporator connected as a circuit, a branch passage connected upstream of the ejector and flowing to an ejector suction through a first throttling means with a fully open position and a second evaporator with a pressure lower than that of the first as taught in instant independent claim 22 or an ejector cycle refrigeration system having a compressor, a condenser, an ejector disposed directly downstream from the condenser and a first evaporator directly

connected to the suction of the compressor, all being connected as a circuit, a branch passage connected upstream of the ejector and flowing to an ejector suction through a first throttling means with a fully open position and a second evaporator with a pressure lower than that of the first as taught in instant independent claim 29, an ejector cycle refrigeration system having a compressor, a condenser, an ejector and a first evaporator connected as a circuit, a branch passage connected upstream of the ejector and flowing to an ejector suction through a first throttling means movable between a fully open position and a fixed throttle position and a second evaporator with a pressure lower than that of the first as taught in instant independent claim 68 and an ejector cycle refrigeration system having a compressor, a condenser, an ejector and a first evaporator directly connected to the compressor suction, all being connected as a circuit, a branch passage connected upstream of the ejector and flowing to an ejector suction through a first throttling means with a fully open position and a second evaporator with a pressure lower than that of the first as taught in instant independent claim 76.

US Publication No. 2004/0079102 A1 to Umebayashi et al. teaches an ejector cycle air conditioner for a vehicle having a compressor, a condenser and an ejector connected in a circuit with an evaporator connected on a branch passage connecting between the condenser and the ejector and flowing to a suction port of the ejector as taught in the instant independent claims, but fails to teach an evaporator located between the ejector outlet and the compressor suction with a pressure greater than that

of the evaporator on the branch passage, an expansion device on the branch passage located serially upstream of the evaporator.

US Patent No. 6,675,609 B2 to Takeuchi et al. teaches an ejector cycle refrigeration system having a compressor, a condenser, an ejector and an evaporator connected in series in a circuit, a branch passage flowing through an expansion device and a second evaporator and into a suction port of the ejector and (implicitly by the placement of components) the pressure in the second evaporator being lower than that in the first as taught in the instant independent claims, but fails to teach the branch passage originating upstream of the ejector as in the instant independent claims or the first evaporator being directly connected to the compressor's inlet as is particularly taught in claims 59 and 76.

US Patent No. 6,651,451 to Cho et al. teaches a refrigeration cycle device having a compressor, a condenser, an evaporator and a vortex generator (taught to be an ejector) connected in a circuit and having a branch passage leading from the outlet of the condenser to a expansion device and a secondary evaporator and thus to a suction port of the vortex generator as taught in the instant independent claims, but fails to teach the vortex generator being installed upstream of the first evaporator or the first evaporator having a higher pressure than the second as in the instant independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel C. Comings whose telephone number is 571-270-7385. The examiner can normally be reached on Mon-Fri 8:00-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules or Cheryl Tyler can be reached on 571-272-6681 or 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel C Comings/
Examiner, Art Unit 3744
29 March 2010

Application/Control Number: 10/581,088
Art Unit: 3744

Page 6

/Frantz F. Jules/
Supervisory Patent Examiner, Art Unit 3744